last year (1904) Kleinschmidt * proposed to regard *Corvus corax varius* of the Faroe Islands as a mutation. As it, however, displays partial albinism in a *variable degree* in different specimens, I do not think that it can be regarded as a typical example of mutation. *Sylvia heinekeni* of Madeira, brought forward on the same occasion by the same author as another instance of mutation among birds, is by others regarded as "an instance of partial melanism" †, or "una varieta melanica" ‡.

If the case of *Tetrao urogallus lugens* were to be ranked as a mutation in an atavistic direction, it might perhaps be regarded as a mutation in a progressive direction that the young of *Cygnus olor* in down, and again in their first plumage and then permanently, are white §, and thus give rise to the form *C. immutabilis*. But other authors say that the characteristics of this Swan are not constant and regard it only as "a quasi-albino produced by domestication" ‖.

Chrysolophus obscurus has also been regarded as a mutation, but I pass over this case as we may soon learn its full history. Dr. C. Kerbert, of the Zoological Gardens of Amsterdam, has the material for its investigation.

XVIII.—*Notes on the Parrots.* (Part IV.)

By T. Salvadori, H.M.B.O.U.¶

Fam. V. Psittacidæ (Cat. Birds Brit. Mus. xx. p. 137).

Subfam. Nasiterninæ (op. cit. p. 138).

This subfamily contains only one genus, *Nasiterna*, which, according to some authors, ought to be named *Micropsitta*, a suggestion that I am not prepared to follow, as the latter name was proposed as a subgenus of *Psittacus* and not as a real genus.

* According to the "Compte Rendu" of the Congress, p. 212.

† Cat. B. Brit. Mus. v. p. 25.

‡ Giglioli, Manuale di Ornitol. Ital. p. 276.

§ *Cf.* F. A. Forel, 'Le Léman,' t. iii. pp. 308–326.

‖ Cat. B. Brit. Mus. xxvii. p. 38.

¶ Continued from p. 131.

The species have been revised by Rothschild and Hartert in their excellent "Notes on Papuan Birds" ('Novitates Zoologicæ,' viii. pp. 79–81), and also in other papers referring to the birds of the Solomon Islands. Four new species have been described since the publication of the 'Catalogue of Parrots.' Rothschild and Hartert have, moreover, published a map shewing the distribution of the genus *Nasiterna* (Nov. Zool. viii. pl. iii.), but it is incomplete, as four species from the Solomon Islands are not included, nor is the doubtful *N. orientalis* from S.E. New Guinea.

Nasiterna bruijni Salvad.; Forb. & Robins. Bull. Liverp. Mus. i. p. 9 (1897); Dub. Syn. Av. i. p. 23, n. 296 (1899); Sharpe, Hand-list, ii. p. 12, n. 1 (1900); Doherty, Nov. Zool. viii. p. 56 (1901) (Kapaur); Rothsch. & Hartert, Nov. Zool. viii. p. 79 (pt. ?) (1901) (Arfak, Kapaur).

Dr. Hartert writes to me that the Ambernoh River, by some mistake, has been mentioned (Bull. B. O. C. x. p. ci, 1900) among the localities whence the Tring Museum has received individuals of this species.

Nasiterna orientalis De Vis, Ann. Rep. Brit. New Guin. 1896–97, App. p. 81 (Vanapa Valley, S.E. New Guinea) (1898); Sharpe, Hand-list, ii. p. 12, n. 2 (1900); Dub. Syn. Av. p. 1034, n. 10 (1903).

Nasiterna bruijni De Vis (nec Salvad.?), Ann. Rep. Brit. New Guin. 1888–89, p. 58 (1890) (Musgrave Range); id. Colon. Papers, n. 103, p. 107 (1890); id. Ibis, 1891, p. 28; Salvad. Mem. R. Ac. Sc. Tor. (2) xlii. p. 89 (1891).

Nasiterna bruijni orientalis Rothsch. & Hartert, Nov. Zool. viii. p. 79 (1901) (Brit. New Guinea).

In the Tring Museum there are five specimens of a *Nasiterna* from British New Guinea (Mt. Owen Stanley and Eafa district), which Rothschild and Hartert believe to belong to *N. bruijni*, so that it is very likely that the bird described by Mr. De Vis is not different from the typical North-western form. Anyhow, De Vis's description, taken from a spirit-specimen, runs as follows:—"Like *N. bruijni*, but with the two outer rectrices green and their tips orange-red

and narrowly edged with yellow; sides of pileum dusky, edged with blue; green feathers on sides of breast and lower flanks very narrowly edged with black; bill horn-grey, feet brown. Length 88 mm., wing 62, tail 28, culmen 6."

It must be noticed that the orange-red tips to the lateral tail-feathers are found also in *N. bruijni*, so this is not a distinguishing character of the South-western bird.

Nasiterna pygmæa (Q. & G.); Forb. & Robins. Bull. Liverp. Mus. i. p. 9 (1897); Dub. Syn. Av. i. p. 23, n. 297 (1899); Sharpe, Hand-list, ii. p. 12, n. 3 (1900); Rothsch. & Hartert, Nov. Zool. viii. p. 79 (1901).

This species seems to be confined to the Berau Peninsula and the Western Papuan Islands; in the Berau Peninsula it has been found by Mr. Doherty near Kapaur on the western coast.

Nasiterna keyensis Salvad.; Dub. Syn. Av. i. p. 24, n. 300 (1899); Sharpe, Hand-list, ii. p. 12, n. 6 (1900); Hartert, Nov. Zool. viii. p. 5 (1901) (Tocal and Doellah, Key I.); Rothsch. & Hartert, Nov. Zool. viii. p. 80 (1901).

Nasiterna viridifrons Rothsch. & Hartert, Orn. MB. 1899, p. 138 (New Hanover); iid. Nov. Zool. viii. p. 80 (1901); Sharpe, Hand-list, ii. p. 12, n. 9 (1900); Dub. Syn. Av. p. 1054, n. 8 (1903).

♂ *ad.* Forehead green, crown dark blue. Sides of head greenish blue or bluish green. Quills blackish, outer webs with green, inner webs towards the base with yellowish edges. Rectrices with very long (4 mm.) bare tips of shafts ("spines"). Middle rectrices blue, the remainder of them black with bluish green outer edges, the three lateral with wide dark yellow tips to the outer webs. Under-side yellowish green, middle of abdomen orange-red; sides of belly and under-tail-coverts bright yellow. Wing 66 or 67 mm.

♀. Without the orange-red patch on the middle of the abdomen.

One pair (preserved in spirit) from New Hanover (*Webster coll.*).

This species is known only from the two typical birds mentioned by Rothschild and Hartert. It seems allied to *N. pygmæa*, from which it differs in the green forehead and dark blue crown.

Nasiterna finschi Rams.; Forbes & Robins. Bull. Liverp. Mus. i. p. 9 (2 ♀, S. Cristoval, Makira) (1897); Dub. Syn. Av. i. p. 23, n. 298 (1899); Sharpe, Hand-list, ii. p. 12, n. 4 (1900); Rothsch. & Hartert, Nov. Zool. viii. p. 80 (1901).

It seems that no more individuals of this species have been procured since the discovery of the typical birds and these brought by Lieut. Richards (two formerly in Tristram's collection, now at Liverpool, and one in the British Museum).

Nasiterna aolæ Grant; Dub. Syn. Av. i. p. 24, n. 30 (1899); Sharpe, Hand-list, ii. p. 12, n. 7 (1900); Rothsch. & Hartert, Nov. Zool. viii. p. 80 (1901); p. 378 (1901) (♂ ♀, Guadalcanar).

Nasiterna nanina Tristr. Ibis, 1891, p. 608 (Bugotu= Ysabel Island); Forbes & Robins. Bull. Liverp. Mus. i. no. 1, p. 9, pl. ii. f. 2 (1897) (type); Dub. Syn. Av. i. p. 24, n. 299 (1899); Sharpe, Hand-list, ii. p. 12, n. 5 (1900); Rothsch. & Hartert, Nov. Zool. viii. p. 80 (1901); p. 188 (pt.) (1901); ix. p. 589 (1902) (Ysabel I. = Bugotu).

Nasiterna aolæ nanina Rothsch. & Hartert, Nov. Zool. xii. p. 254 (Ysabel, Choiseul, and Bougainville) (1905).

At the time of the publication of the 'Catalogue of the Parrots' I was acquainted with this bird only from the description just published. I particularly noticed its diminutive size; but now we know that Dr. Hartert, having had the opportunity of examining the type of *N. nanina*, has found that it is a young bird with the wings and tail only three-quarters grown.

Rothschild and Hartert give the following description of *N. nanina* Tristr., from Ysabel :—

"♂ *ad.* Upper-side grass-green, somewhat yellower on the head; forehead yellowish green to greenish yellow, centre of

crown washed with blue. (There is one feather on the crown, just above the forehead, yellow with an orange tip. Whether this is normal or not we cannot say.) Wings blackish, outer webs with narrow green edges, inner webs edged with olive-brown. Central pair of rectrices blue with black shafts; next pair of rectrices black on the inner webs, tips greenish blue, outer webs bluish green with a black patch, following pair black, broad apical portion green with a yellow spot on the inner web, the two lateral pairs with the outer web green, inner web black, apical third to fifth yellow. Under-side yellowish green, darker and purer green on the thighs and flanks; feathers of the cheeks with pale blue tips, under-tail-coverts yellow with wide green tips. Under-wing-coverts yellowish green. 'Iris pale red, feet pale bluish slate, bill dark slate-coloured.' Wing 60, tail (with free end of shaft) 28½, bare portion of shaft about 3–4½, tarsus 7½, middle toe 13, bill (end of cere to tip) 7 mm.

"♀. Like the male, but cheek-feathers orange, under-side perhaps slightly more yellowish. The markings of the rectrices vary a little, but agree essentially with those in the male. Wings 58–62 mm.

"*Hab.* Ysabel, Choiseul, and Bougainville, Solomon Islands."

To this description Rothschild and Hartert add the following remark:—"*Nasiterna nanina* is most closely allied to *N. aolæ* from Guadalcanar, from which it differs in its smaller size and (if the colours in our *N. nanina* are fully developed) in the lesser extent of the blue area on the crown and cheeks."

Nasiterna tristrami Rothsch. & Hartert.

Nasiterna nanina part., Rothsch. & Hartert, Nov. Zool. viii. p. 188 (1901) (Kulambangra).

Nasiterna tristrami Rothsch. & Hartert, Nov. Zool. ix. p. 589 (1902) (Kulambangra); Dub. Syn. Av. p. 1054, n. 9 (1903).

Nasiterna aolæ tristrami Rothsch. & Hartert, Nov. Zool. xii. p. 254 (1905) (Kulambangra, Rendova, New Georgia, and Gizo).

"Like *N. nanina*, but differs as follows:—It is much larger; the bill is longer and wider; the centre of the crown is darker and more grassy green than the rest of the head, but without any blue tinge. The *male* has narrower, much paler and less conspicuous bluish tips to the feathers of the cheeks. Wing, ♂ 66–67, ♀ 61–62; bill (end of cere to tip), ♂ 11, ♀ 8 mm.; tail 27–29½ mm." (*Rothsch. & Hartert.*)

In the description of *N. tristrami* there is no mention of the different colouring of the *female*, but on a previous occasion Rothschild and Hartert, mentioning the birds from Kulambangra, make the remark that the *females* are smaller and have the feathers of the cheeks reddish orange as in the allied species.

Hab. Solomon Islands; Kulambangra, Rendova, New Georgia, and Gizo.

The authors of this species make the additional remark that it is quite distinct from *N. finschi*, the male of which has the middle of the abdomen orange-red.

Nasiterna misoriensis Salvad.; Dub. Syn. Av. i. p. 24, n. 302 (1899); Sharpe, Hand-list, ii. p. 12, n. 8 (1900); Rothsch. & Hartert, Nov. Zool. viii. p. 80 (1901).

Rothschild's collector failed to obtain specimens of this species, so that it still remains unrepresented in the Tring Museum.

Nasiterna maforensis Salvad.; Dub. Syn. Av. i. p. 24, n. 303; Sharpe, Hand-list, ii. p. 12, n. 10 (1900).

Nasiterna geelwinkiana Schleg.; Rothsch. & Hartert, Nov. Zool. viii. p. 80 (1901).

Rothschild and Hartert say that I renamed both forms of *N. geelwinkiana* Schleg., under the appellations of *misoriensis* and *maforensis*, because Schlegel's name referred to two different forms; but besides this reason there is another derived from the fact that both forms being found in the islands of Geelwink Bay, it would be always uncertain to the mind of the student for which form the name *geelwinkiana* should be used, that from Mafor or that from Misori.

Nasiterna pusio Sclat.; Forb. & Robins. Bull. Liverp. Mus. i. p. 9 (1897); Hartert, Nov. Zool. v. p. 531 (1898) (Sudest I.); vi. pp. 212, 216 (1899) (St. Aignan); Dub. Syn. Av. i. p. 24, n. 304 (1899); Sharpe, Hand-list, ii. p. 12, n. 11 (1900); Rothsch. & Hartert, Nov. Zool. viii. p. 81 (1901) (Duke of York Islands, New Britain, New Ireland, St. Aignan, and Sudest Islands, Fergusson, South-east New Guinea, Milne Bay, German New Guinea to Konstantinhafen).

The Tring Museum has 25 specimens of this form from the above-mentioned localities.

"The sides of the head are ochraceous. One from the Kotoi District (*Anthony Coll.*) has the sides of the head very bright orange, the blue of the crown less extended laterally than usual, the under-side more yellowish and with an orange tinge on the middle of the abdomen. This specimen is, however, very closely approached by others, and we are not, at present, able to make any subdivisions of *N. pusio*." (*Rothsch. & Hartert.*)

Nasiterna beccarii Salvad.; Sharpe, Hand-list, ii. p. 12, n. 12 (1900); Rothsch. & Hartert, Nov. Zool. viii. p. 81 (1901).

Nasiterna pusio, var. *beccarii* Dub. Syn. Av. i. p. 24 (1899).

"Differs from *N. pusio* in its much deeper brown cheeks and sides of the head and deeper blue crown.

"Only two specimens are known, from the western coast of Geelwink Bay between Dorey and Wandammen; one is at Genova, the other at Milan." (*Rothsch. & Hartert.*)

Nasiterna salvadorii Rothsch. & Hartert, Nov. Zool. viii. p. 81 (1901) (Takar, Humboldt Bay, Ambernoh River).

? *Nasiterna bruijni* Rothsch. (nec Salvad.) Bull. B. O. C. x. p. ci (1900) (Ambernoh River).

"Differs from *N. pusio* in the sides of the crown being dull yellow instead of ochraceous. The blue of the crown is less bright and more greenish blue, the size smaller than that of *N. pusio*. Wing 58–63 mm." (*Rothsch. & Hartert.*)

Hab. North coast of New Guinea.

The Tring Museum has "a pair from Takar (the female with the crown duller, sides of crown more greenish), one ♀ ? from the north coast between 136° and 137° Long., four from near Humboldt Bay, and two from the lower Ambernoh River." (*Rothsch. & Hartert.*)

[To be continued.]

XIX.—*The Breeding-grounds of the Rosy Gull.*—Part II.

By S. A. Buturlin.

As stated in my former paper (*suprà*, p. 131), eggs of *Rhodostethia rosea* collected on the 26th of June were much incubated, and I had hoped to procure nestlings immediately. On the 30th of June, during a heavy snow-storm which lasted all day, I visited one of the breeding-colonies near Pokhodskoe, but the nests were deserted, though from the actions of the parents I felt sure that the newly-hatched young were not far off. Not willing, however, to disturb the birds so near my house, I proceeded, on the 1st of July, to another island, some two hundred paces in width, where I found nests of *Colymbus arcticus*, *Dafila acuta*, *Harelda glacialis*, and *Calcarius lapponicus*. The Terns' eggs were in many cases already chipped, while some of those of the Rosy Gull which had been purposely left were hatched, although the paler second clutches were but slightly incubated. I saw two young birds, but could only manage to catch one, evidently two or three days old.

Soon afterwards I left Pokhodskoe, which lies nearly in the centre of the Kolymá Delta, for the north-western portion, by the "*Chúkotskaya protóka*" (Chukche's channel) as far as the "*Cháyachya záimka*" (Gulls' farm). Here we were clear of the *Salix*- and *Alnus*-thickets, and were on the true tundra, which afforded a welcome relief to both eyes and limbs. After the delay caused by a long and heavy snow-storm I discovered two new breeding-colonies of this Gull, one on the wet grassy border of a lake about a kilometre